

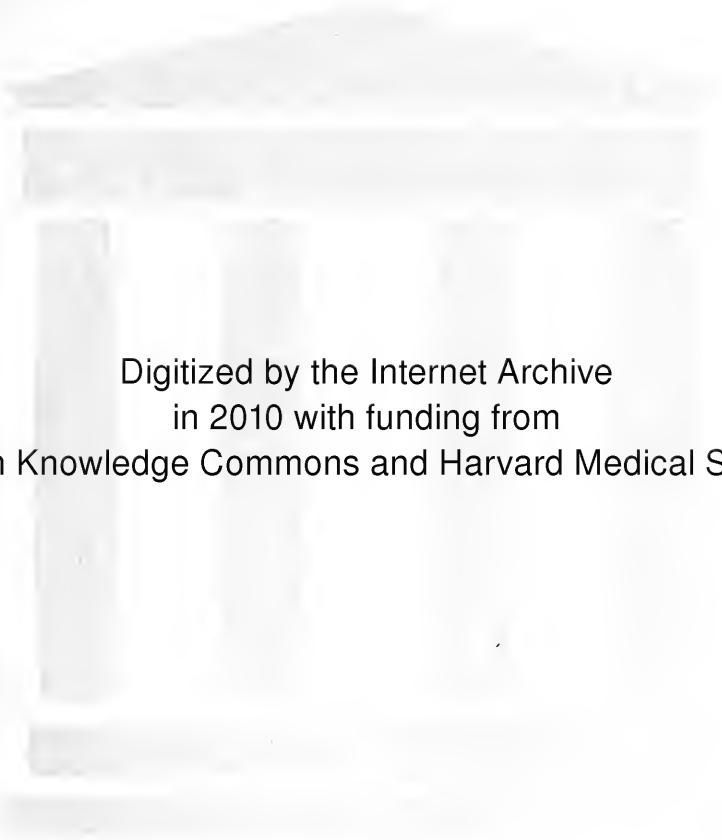


BOSTON MEDICAL LIBRARY
in the Francis A. Countway
Library of Medicine ~ *Boston*

22

0

248



Digitized by the Internet Archive
in 2010 with funding from
Open Knowledge Commons and Harvard Medical School

22.0.24

FIRE ANALYSED;

O R,

The several Parts of which it is compounded

CLEARLY DEMONSTRATED

By EXPERIMENTS.

The TEUTONIC PHILOSOPHY

PROVED TRUE

By the same EXPERIMENTS.

AND

The MANNER and METHOD

OF MAKING

ELECTRICITY

MEDICINAL and HEALING

CONFIRMED

By a VARIETY of CURES.

By *RICHARD SYMES*,

Rector of St. Werburgh's, *Bristol*.

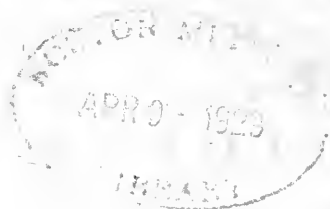
B R I S T O L :

Printed by *Thomas Cocking*, in Small-street.

And sold by *ROBINSON and ROBERTS*, in Pater-noster-Row, London;
Mrs. PALMER, in Bristol; and *Mr. FREDERICK*, in Bath;

MDCCLXXI.

[Price 1s. 6d.]



22.0.248.

ADVERTISEMENT.

NOTHING but the Love of Truth, and the Desire of imparting the Knowledge of it, is the Motive for publishing this Treatise.

Had any one undertaken the Task from the Hint, given by me nine Years ago in the Gentleman's Magazine, it would have saved me much Trouble, and afforded me more Pleasure.

But unwilling to let the Discoveries I had made perish with me; and thinking them of too interesting a Nature to be buried in Oblivion, I have made them public, wishing that the Subject may be pursued and improved for the Benefit of future Ages.



CONTENTS.

INTRODUCTION

TREATS of the contrary Powers, that are in Nature, both within and without Man, and of the rich Treasures to be found in the Writings of JACOB BEHMEN and Mr. LAW.

CHAP. II.

Explains by Experiments the Arcana and Wonders of Nature as opened in the Works of JACOB BEHMEN, and Mr. LAW. *page 6.*

CHAP. III.

Proves that there is only one Fire in all Nature, demonstrates by Experiments that Fire is the Life of all Things, and contains a curious Remark on Precipitate. *page 19.*

CHAP. IV.

Shews that the Syftole and Diaftole of the Heart is caused by Fire, and that Fire is the Cause of the Redness of the Blood. *page 29.*

C H A P. V.

Shews the Sentiments of Mr. BOYLE, and Dr. BOERHAAVE, respecting Men's Ignorance of Nature, also proves that Sir ISAAC NEWTON was a Reader of BEHMEN, and borrowed from him his two Powers of *Attraction* and *Repulsion*, and concludes with the Remarks of the ingenious Dr. WATSON on Electricity. *page 35.*

C H A P. VI.

Treats of the Number *Seven*, and of the frequent Mention of *Fire* in the Scripture, shews from whence the *Fire* shall come, that will cause the last Conflagration, and concludes with a serious Address to Infidels; *page 41.*

C H A P. VII.

Shews that Electricity comes the nearest to a Panacæa of any Medicine yet discovered, explains the electrical Shock, and describes a Planetarium, that beautifully shews the Revolutions of the Planets. *page 52.*

C H A P. VIII.

Contains several and various Cures performed by Electricity, viz.

1. Hysteric Fits.
2. Hemiplegia.
3. Tertian Ague.
4. Swelled Arm from Bleeding.
5. Loss of Sight.
6. Pains and Swellings.
7. Wrenched Knee.

8. White Swelling.
9. Scalds and Burns.
10. Erysipelas.
11. Weakness and Loss of Strength from Lying-in.
12. Rheumatic Pains.
13. Decay of Sight.
14. Sciatic.
15. Violent Contusion from a Fall.
16. Tertian Ague.
17. Numbness.
18. Rheumatic Pains.
19. Distorted Hand.
20. Loss of Limbs after Lying-in.
21. Pain in the Back caused by frequent Miscarriages.
22. Gout in the Stomach.



FIRE ANALYSED, &c.

INTRODUCTION

Treats of the contrary Powers, that are in Nature, both within and without Man, and of the rich Treasures to be found in the Writings of JACOB BEHMEN and Mr. LAW.

THE Generality of Mankind pass through Life without Reflection. No one, comparatively speaking, seeks to know himself, or enquires how he stands related to Nature or Nature to him. Having seen how others come into the World this satisfies him as to his own Existence; and as most are only solicitous how to preserve and indulge themselves, his Concern carries him no further than to tread in their Steps. But now and then one arises, who ventures out of this general Path, not satisfied with the mere Acts of Eating, Drinking and Sleeping, he begins to consider the End of Existence, and

B

this

this leads him to enquire into Nature, the Qualities of it, and of what it consists. Such an one, Reader, suffer me to say it, it is spoken without Vanity, is the Author of this Treatise. Perceiving throughout Nature Qualities diametrically contrary, this awakened his Attention to consider why and for what Reason there was nothing either within or without him but what had its Opposite. Without, his Eye clearly saw it. Within, his Feeling was his Evidence. Within, he felt the contrary Qualities of Anger and Love, Rage and Meekness, Joy and Sorrow, &c. Without, he perceived Fire and Water, Light and Darkness, Heat and Cold, Calms and Tempests, &c. Now in himself he observ'd these contrary Qualities often stirred up and exerting an uncontrollable Power. If Anger arose, it hurried him to Acts, that Reason condemned, but could not prevent. If Sorrow was stirred up, Joy disappeared, the Remembrance was gone, and it was as tho' it had never existed. Now these two contrary Qualities, he felt, had a Power to suppress and overcome each other; and also at the same Time that they were acted upon and called forth independant of his

his Will. Good News called forth Joy. Bad News stirred up Sorrow. Now this shows that Man has Powers within him that Sounds and Objects can do more with than has ever yet been effected by the boasted Ability of Reason.—But now as it is with the Powers of Joy and Sorrow, so is it with Rage and Meekness. They are equally and independant of Reason stirr'd up in us, but with this Difference, the former seems more prevalent in Mankind than the latter; the latter has its Stirrings, and often meets with Incidents that call it into Action, even in the most cholerick; but the former prevails for the most Part in Man. The two first Children that were born of EVE are striking Instances of the Power of these two contrary Qualities ruling and governing in the Heart of Man. In CAIN *Rage* ruled and governed, in ABEL *Meekness*; but CAIN's *Rage* got the Mastery over ABEL's *Meekness*.

BUT now as to outward Nature, where the Will of Man cannot reach, there the contrary Qualities are regulated by an all-wise, but invisible Agent. The Heat and Cold are wisely temper'd, neither are suffered to destroy the other. The Earth an-

nually brings forth numberless Productions for the Service of Man ; but yet were these contrary Qualities suffered to work blindly by themselves, Vegetation would cease and every earthly Life would end ; for if the *Heat* prevailed, all would be burnt up. If the *Cold*, all would be one congealed and fixed Body. And yet I think it cannot but be visible to every one how necessary *Heat* and *Cold* are in the Creation and that they are always at work, but at the same Time governed and directed by an all-wise, and all-powerful Agent ; because if they were left to themselves, the one would soon be the Death of the other.

WHILST my inquisitive Mind was searching into these Things, and yet unable to find out the why and wherefore such opposite Qualities should be in Nature, providentially I met with two Authors, in whose Writings these Mysteries are explained, and Nature as it were dissected. These Authors are JACOB BEHMEN and Mr. LAW ; whose Works may be justly compared to a Mine full of the richest Ores. The Searcher and Enquirer after Truth will find in them *That* of so precious and sublime a Nature, as
must

must satisfy the most enlarged Capacity. Some indeed, who have casually stumbled on them, either prejudiced in Favour of their own supposed Knowledge, or having no Relish for the Truths contained in them, have despised and treated them with Contempt; but so it has been and ever will be with Men of Eminence. They will have their Despisers as well as Admirers; but Scorn and Contempt can never invalidate Truth. Truth will ever and invariably remain Truth, let its Opposers be ever so numerous: But that these Men have opened the deepest Truths in their Writings, if Experiments are any Criterion to judge from, I will, by those that are incontrovertible, make it clear and evident. But how I became able to prove by Experiments the Arcana of Nature, as laid open by JACOB BEHMEN and Mr. LAW in their Writings, shall be the Subject of the next Chapter.

CHAP.

CHAP. II.

Explains by Experiments the Arcana and Wonders of Nature, as opened in the Works of JACOB BEHMEN and Mr. LAW.

MY Attention was stirred up by a Book, published by Mr. LOVETT, of *Worcester*, setting forth a Variety of Cures perform'd by Electricity. I had seen many Years before this an electrical Machine, and had tried all the common Experiments that were then known; for very little had been written on the Subject, and that by no Means satisfactory; no one being able to trace out the Cause of the striking Appearances rais'd by an electrical Apparatus. Like other strange Sights therefore, which the oftener they are seen, the less they affect us, so it happened with electrical Experiments. They tired and then naturally sunk into Neglect; for having lost their Power to keep up the Attention; and despairing of ever reaching the Cause, I left it, where I then thought it, impenetrably hidden, amongst the *occult Qualities*. But reading in Mr.

LOVETT

LOVETT of its Medical Virtue, this roused my Attention to a more accurate Disquisition, and to search minutely after what I had before given up as not to be found. I tried every Experiment my Imagination suggested, and at last discovered the Secret I sought for. But here I own that I owe my Success to a Letter of the ABBE NOLLET's* published at that Time in the Gentleman's Magazine. The ABBE was then trying Experiments, and maintained in his Letter that there were two Currents in the electrical Fire diametrically opposite. This Hint was enough for me, who was before sufficiently convinced that there were in Nature Qualities directly contrary and opposite to each other, both from my own Experience and JACOB BEHMEN's and Mr. LAW's Writings. But now I was able to demonstrate this Truth by Experiment, and to bring forth to open View these hidden secret working Powers, known only to us by their Effects. But what was more, I found now I could prove by Experiments to the Senses that there were in Nature seven Properties; as set forth and maintained in the Books of the
above

* Gentleman's Magazine Aug. 1759, p. 364.

above two eminent Writers; the Ground of which are the two opposite Qualities before-mentioned. Such a Discovery, as may naturally be imagined, made me desirous of publishing it to the World, in hopes that some abler Hand might throw more Light on the Subject, accordingly I sent to the Gentleman's Magazine the following Letter, which was published in the Month of April. 1762.

“ A LETTER to the Author of the Gentleman's Magazine: Wherein the Principles of Electricity are proved by Experiments to be the same with those of JACOB BEHMEN's, and Mr. LAW's Philosophy.

“ S. I R.

“ WITHOUT making any Apology I send you this Letter, which I think, is on an interesting Subject.

“ My Design is not to make myself known, I only write for Information, and to stir up some abler Hand to finish what I think only the Outlines of a most important Discovery. For if JACOB BEHMEN's and Mr. LAW's Philosophy can be proved by Electricity, and, *vice versa*, Electricity can
be

be explained by their Writings; there is scarce any Phænomenon in Nature, but what may be made intelligible.

“ BUT not to detain you longer from what I intend to lie in as little Compass as possible, the following are my Experiments to prove, that Mr. LAW’s Philosophy is the same that the electrical Machine discovers to our Senses.

Mr. LAW says, “ there are seven Properties in Nature,” indeed he does not say this as the first Discoverer of this great Mystery, for he is candid enough to tell us from whom he had it; but as he was a perfect Master of it, and has given it to us in a Style more easy at first to be comprehended, than that of JACOB BEHMEN, from whom he had it; I scruple not to call it, Mr. LAW’s Philosophy.

“ IN proving these seven Properties, Mr. LAW says, “ Nature took its Rise from the “ Will of the Deity.” This he explains after the following Manner.

“ Will is Desire, now Desire has these Properties belonging to it, *compressing, inclosing, or shutting up; drawing or attracting.* Now the first of these, *compressing, inclosing,*
or

or *shutting up*, is contrary to the last, *drawing* or *attracting*, for the first has no Motion in it, but only compresses, holds together or endeavours to abide in Stillness; but the last has Motion in it, and therefore is contrary to, and never continues in a quiet State.

“ Now these two Properties brought forth by the same Will, have *equal Strength and equal Power*, and always act in Opposition to each other, which Opposition unavoidably produces a third Property, viz. a *whirling round*, for as the *holding fast* and *going out* are equal in Strength and Power to each other, and neither for the other's Opposition, can go backward or forward, up or down, each acting equally against the other, a *whirling round* must be caused.

“ Now these three, the *holding fast*, the *going out*, and *whirling round*, all necessarily arising from the Will of the Deity, Mr. Law calls the *three* first Properties of Nature.—The *fourth* Property, he says, is *Fire*, produced from the violent Agitation, Motion and Anguish of the three first. The *fifth* Property, he says, is *Light*. The *sixth*,
Life,

Life, and by the *Seventh*, as JACOB BEHMEN also does, he means, *Spirit*.

“ Now I prove by the Help of the electrical Machine, these seven Properties to be in Nature, exactly as Mr. LAW has described them, after the following Manner.

“ ON the Conductor I tie several Threads of about four Inches long ; I then take an Hoop, the Diameter of which does not exceed the Atmosphere I am able to raise by the Friction of the Globe, and tie some Threads upon it of equal Length with those I tie on the Conductor. This done, I place the Conductor exactly in the Center of the Hoop, and on setting the Machine in Motion, all the Threads are immediately extended, those on the Conductor with their Points towards those on the Hoop, and those on the Hoop towards those on the Conductor.

“ THIS Phænomenon, so contrary to every Thing I ever yet saw, greatly astonished me ; for if we blow with our Lips, every Thing within the Reach of the Blast, flies from, but not to us ; but here tho’ there is a manifest Blast issuing from the Conductor (for it may be felt against the Hand) yet the Threads on the Hoop instead of flying from,
in

in the same Direction with those on the Conductor, act directly opposite and point to them; which is an evident Proof that there are two Streams or Currents, one issuing to, the other from the Conductor, or, in other Words, that, there are two Properties in Nature always acting contrary to each other, the one *attracting*, the other *repelling*.*

“ BUT here, perhaps, it may be objected that I carry Matters too far, in thinking I have discovered two *contrary Properties* in Nature, when it is evidently no more than a strange Appearance produced by an electrical
Ma-

* The ABBE NOLLETT, by a Variety of Experiments, hath now put this beyond all Doubt. These Experiments Dr. WATSON tells us are sixty in Number, and exceedingly well chosen to prove the simultaneous Affluence and Effluence of the electric Matter.

I will only add one more Experiment, which I am not certain is included in the ABBE NOLLET'S.—Suspend a Bottle on the End of a Conductor supported either on Glass or Silk; let there be nothing near the Bottle and it will be found impossible to charge it, but apply a Finger to the Side and it will be filled and give a Shock. To the Finger it appears as if the Matter that ran in at the Top discharged itself at the Side; but the charging of the Bottle shows this to be a Deception, and proves at the same Time that for every Spark that came out of the Bottle, a Spark went into it likewise from the Finger; for these two opposite Powers can only be di-
vided

Machine, just as the Vibration of a Pendulum is produced by the Weight and Wheels of a Clock. This Objection, as it is natural to make it, I thought proper to mention, and then remove, that we may have the Way clear before us.

“ THE Vibration of the Pendulum is nothing more than an Effect, of which the Structure of the Clock is the Cause. But the electrical Machine is not the Cause of these strange Appearances; it is only the Means of making visible to us what is hidden in Nature; just as the striking together a Flint and a Steel is the Means of bringing forth

vided by Words; where one acts, there the other always is. But to put this beyond Dispute, remove the Finger and hold the Point of a Pin at the Distance of four or five Inches, and a Flame will be seen rushing from it, and the Bottle will fill and be charged as well, as if the Finger had been kept close to it.——

N. B. This *Flame* discovers to us another Secret, viz. that it is not Air but real Fire that issues towards the Bottle. I make this Remark, because some have concluded; that, as culinary Fires rarefy the Air around them, into which the denser Air presses, it is only Air that rushes into the electric Fire, and therefore that there is no such Thing as Attraction.——The Misfortune is, what we divide by Words, we suppose may be divided in Fact. But where Fire is, there is Air, and where Air is, there is Fire; for Fire always brings forth Air with it.

forth to our Sight the Fire that lay hidden within them. The Collision of the Flint and Steel is not the Cause or Maker of Fire, but only a Means of making visible what before was shut up and concealed from our Sight.

“ After the same Manner acts the Friction of the Globe against the Cushion; the Friction does not create these strange Appearances, but is only a Means of making them visible. Therefore I conclude, that what we see does not then begin to be, when the Machine is put in Motion; but that the Machine is a wonderful Discoverer of the hidden Properties of Nature, which are always acting in the same Manner, tho’ so secretly that our bare Sight cannot discover them.

“ Now that these two *Properties* acting thus contrary to each other are the Cause of a *continual Whirling*, Wheel or Circle, I prove from the *Leyden Experiment*.

“ IT is well known to all Electricians, that unless a Circle be made between the Bottom and Top of a charged Bottle, no Shock can possibly be given, but let a Bottle be charg’d and then a Communication
made

made between the Bottom and Top, and something of unparallelled Force will be found to act within it; but without making a Circle, we cannot come at any Knowledge of its Power. But its Strength is now so far ascertained, that nothing is found able to stand against it, and by the Help of large Jars its Power may be increased to a most astonishing Degree.

“ Now these *three Properties* made visible by the Help of the electrical Machine, are manifestly JACOB BEHMEN'S and Mr. LAW'S *three first Properties of Nature*.

“ THE *fourth* Property, *Fire*, will not require me to say much upon it, for it is well known that it is real Fire that bursts forth from the charged Jar or Bottle in the Explosion; and that it will set fire to Spirits, and properly prepared Combustibles.

“ THE *Fifth* Property, *Light*, follows from the Fire. This also requires no more to be said than that whoever has seen the Fire burst from the Bottle, must have seen Light, but indeed so much Light may be raised by the Machine with the Help of an Air-Pump as even to read large Print by it.

“ THE

“ THE *sixth* Property is *Life*. Now that Fire is the Radix of Life evidently appears from the following Experiment: Let a Cat and a Candle be put together into an Oven; let the Door have a Pane of Glafs fixed in the Middle, so as no Air can penetrate it, and then let the Door be closely luted to the Mouth of the Oven, and you will perceive that the same Fire that is needful to keep up the Flame of the Candle is needful also for the Life of the Cat; for the Instant the Candle goes out, that Instant the Cat dies.* [But the Reader will find as he goes on much clearer Proofs for this Assertion.]

“ THE *seventh* Property is *Spirit*. This the Machine makes as evident as all the rest, for when it is put in Motion, there issues from the End of the Conductor a Spirit, or Air (for they are both the same) that may be felt; and, in Sensation is not unlike what we make when we softly blow upon our Hand with the Lips contracted: Now here the Machine ceases, here its Discoveries end, it has no more Properties to display, unless we call its lately discovered medical Virtue another Property; but this must

* Freke on Fire, p. 33.

must not be looked on as another Property, as all the rest manifestly and distinctly are, but rather a blessed Effect of the Whole."

"Now is it not astonishing that these two Men JACOB BEHMEN and Mr. LAW, should write so clearly and so justly of Nature, without the Help of any Instrument to assist them? JACOB BEHMEN especially, writes in the Style in which an Electrician would express himself; for he speaks of the Fire bursting forth with a violent Crack, and so exactly describes the Noise and Flash, that one would think, at first Sight, he had seen the Fire collected in a Bottle and then discharged.*

"AND now, Sir, tho' I make no doubt many will be carping at what has here been said, as has been the common Practice with Respect to those eminent Writers above-mentioned, whose Philosophy now stands established on Experiment, yet so long as this Maxim of the Schools, *sensus non possunt falli*, remains good, what is founded on Experiment cannot be shaken. However this one Thing I require of every Opposer that he produce his Experiments to support his Opposition,

C

* See BEHMEN's Threefold Life. Page 16, 17, 18.

position, in as clear and candid a Manner as I have, to elucidate this Philosophy. There can be no Deception in Experiments; I shall therefore take no Notice of any Answerer, unless he contradicts by Experiment, what by Experiment, I think I have clearly demonstrated."

No one, that I have heard of, ever made the least Objection to the above Letter, but my hope was, that some one or other would have thrown greater Light on the Subject; for many Persons were at that Time trying Experiments; and several since have wrote on the Subject, who have incontestably proved that what used to be called electric Matter, is real Fire, and that it exists and is to be found in every Place; but no one has yet attempted to show what this Fire is, from whence it proceeds, or whether it be an Unit or composed of Parts. This I shall endeavour to elucidate in the following Chapters.

C H A P. III.

Proves that there is only one Fire in all Nature, demonstrates by Experiments that Fire is the Life of all Things, and contains a curious Remark on Precipitate.

CUSTOM, which too often tyrannizes over our Understanding, has hitherto arbitrarily fixed the Epithet *Electric* to a Machine, which bids the fairest to be the most wonderful Instrument ever yet discovered; either for its Usefulness, already found out, in the Medical Way, or for Experiments in natural Philosophy. But I will not here contend with Custom, it is of too stubborn a Nature to yield to Reason or Argument. Only I would endeavour to free the Reader's Ideas from Confusion, lest when I speak of *electric Fire*, he should imagine that it is something dependent on, or produced by the *Apparatus*. I would therefore here remark, that there are not in Nature two *Fires*, or *Fires* of a different Quality from each other, but that the Fire, by which we warm ourselves, is the very

same as that made visible by an electrical Apparatus. But with this Difference, the first forbids us to approach too near it, that raised by a Machine may be as safely felt as cold Water ; and yet *this* may be excited to as high and inflammable a State, as the Flame of a Candle with which our Fires are lighted.

FIRE is the most wonderful of any Thing we have to do with ; and yet scarce is any one's Curiosity or Astonishment raised by it. The Reason is, continual Use gets the better of our Attention. Knowing how to procure Fire whenever we want it, we are under no more Concern than to get those Materials, that can furnish us with a Sufficiency of it for all our Purposes ; thus Day after Day we let pass unnoticed the most astonishing of all the Elements ; even Chymists, who make so much Use of Fire, have never yet, as I have read, entered further into it than to try its Effects, and how far it would operate. But now it is found to be compounded of several Parts ; by the Help of an electrical Machine we can analyse it, and show all its Properties distinctly to the Senses.

BUT

BUT as I have here spoken of the Chymists, I will mention an Incident that happened when I was once trying Experiments. A very ingenious Chymist being present I asked him if he would taste the Fire, the Question startled him, but seeing me do it, he was encouraged to try, but rose from the Chair with Astonishment. “ I taste, said he, an *Acid*, and now I know, what I never could account for before, that it is the *Acid* in Fire that gives the *Spicula* to *Precipitate*.” This Observation I thought too curious to omit. But as well as being tasted, the Fire may be also smelt, for after a Machine has been worked some Time in a close Room, a strong Smell of *Sulphur* may be perceived. But no more of this now. I would speak here expressly of Fire, and not of its Properties.

IT was the Opinion of the Ancients that Fire was in every Thing: Nay that every Thing living, whether Animal or Vegetable, owed its Life to it; for this Reason they called it the *Anima Mundi*. From whence they got this Truth, or from what Experiments they drew their Conclusions, it is not

material to enquire ; an electrical Machine will verify it to our Senses.

JACOB BEHMEN tells us, his Knowledge of Nature was open'd in him by God. This is an Assertion that many may call his *ipse dixit* ; be that as it may, it reduces us to this Dilemma, either to allow or deny what he says. If we deny, to what or whom shall we attribute those deep and wonderful Discoveries that are to be found in his Writings, and which Experiment proves to be true ? Many have been the Abuses poured upon him from every Quarter ; but which should be most regarded, the Ravings of Folly, or the Evidence of the Senses ?

MR. BOYLE in his Book on the Usefulness of experimental natural Philosophy, says, like a Man of Candor (Page 283,) “ Perhaps neither Nature nor Mankind is much beholden to those, that too rigidly or narrowly circumscribe or confine the Operations of Nature, and not so much as allow themselves or others to try whether it be possible for Nature, excited and managed by Art, to perform diverse Things, which they never yet saw done, or work by diverse
Ways,

Ways, differing from any, which by the common Principles, that are taught in the Schools, they are able to give a satisfactory Account of."

JACOB BEHMEN and Mr. LAW have written, I own, of Nature quite different from all other Writers. But is this a Reason for rejecting what they have said? GALILEO, the famous Inventor of the Telescope, for maintaining the Copernican System, a System now generally receiv'd, was twice thrown into the Prison of the Inquisition as an Heretick. But because his Persecutors, the Jesuits, did not then believe that the Sun was a fixed Body and that the Earth moved round it, were his Assertions less true? Time and Experience have removed this Prejudice, and fixed the Error on the right Persons. "One shall rarely meet, says the Author of GALILEO'S Life, with a more glaring Instance of Blindness and Bigotry." To condemn an Author because he has written contrary to our preconceived Opinion is as good an Argument of sound Sense and Understanding, as to pronounce that Fruit bad and good for nothing, which we have never tasted.

WHEN

WHEN JACOB BEHMEN was strictly examined at the *Saxon* Court by Men of the greatest Learning, Professors in every Science, brought together for this Purpose by the Elector, they discovered so much Honesty, Candor, and good Sense, that not one of them condemned him, even tho' he said many Things to them far beyond their Comprehension. What he declared was from an Insight given him by GOD into Nature. Now that there is a Power in Nature always at work, is evident from the Effects. But what is this Power? *It is Fire.*—The tenderest Leaf on the highest Tree shows at the extremest Part of it that there is Life, but what causes this Life? *It is Fire.*

BUT that no one may say this is my *ipse dixit*, the two following Experiments are here introduced that the Senses may have full Proof of the Assertion.

EXPERIMENT the FIRST.

PLUCK a Branch from any Plant, the Leaves of which would not be too ponderous for the Power you are able to raise with your Machine, and observe when its Leaves begin to droop, at this Crisis place it on your
Glasses

Glasses and electrify it, and you will see that the *Fire* will have the same Effect upon it, as when it was growing upon the Plant; the *Fire* will pervade and circulate thro' every Part of it, and make it appear as if it was living.

EXPERIMENT the SECOND.

TAKE two Plants of equal Size and similar Appearance in Pots; electrify one of them for a Quarter of an Hour or ten Minutes every Morning. In a few Days you will see a manifest Difference. The electrified Plant will outstrip and look much more flourishing than the other. Now what stronger Proof than this can we have that *Fire*, as JACOB BEHMEN and Mr. LAW assert, is the *Radix* of Life. In the Plant growing in the Garden, we can only see the Effect of the vivifying Power swiftly pervading and rapidly circulating thro' every Part. In the electrified Plant we see the Cause as well as perceive the Effect of the subtil Fluid.

I SHALL conclude this Chapter with a Passage out of Mr. LAW's Appeal apposite to my present Subject. "The Reader, says he, (Page 163) ought not to wonder or be
offended

offended at the frequent mention of the Word *Fire*, which is there used to denote the true Nature and State of the Soul. For both Nature and Scripture speak continually the same Language. For wherever there is mention of Life, Light, or Love in the Scripture, there Fire is *necessarily* supposed, as being that in which all Life and Light and Love must necessarily arise, and therefore the Scriptures speak as often of Fire, as they do of Life and Light and Love, because the one necessarily includes the other. For all Life, whether it be *Vegetable*, *Sensitive*, *Animal*, or *Intellectual*, is only a kindled Fire of Life in such a Variety of States, and every dead insensitive Thing is only so, because its Fire is quenched, or shut up in an hard Compaction. If therefore we will speak of the *true Ground* of the fallen State of Men and Angels, we are not at Liberty, to think of it under any other *Idea*, or speak of it in any *other Manner* than as the *darkened Fire* of their Life unable to kindle itself into Light and Love. Do not the Scriptures strictly confine us to this Idea of Hell? So that it is not any particular Philosophy or affected Singularity of Expression, that
 makes

makes me speak in this Manner of the Soul, but because all Nature and Scripture forces us to confess, that the Root of all and every Life stands and must necessarily stand in the *Properties of Fire.*"

"THE holy Scriptures also speak much of Fire in the Ideas, which they give us both of the divine Nature and of created Spirits, whether they be saved or lost. The former, as becoming Flames of heavenly Light and Love; the latter, as dark Fire-brands of Hell."

"IT ought to be no Reason, why we should think *grossly* of Fire, because it is seen in so many *gross Things* of this World. For how is it seen in them? Why only as a *Destroyer*, a *Consumer*, and *Refiner* of *all Grossness*, as a *Kindler* of Life and Light out of Death and Darknes. So that in all the Appearances of Fire, even in earthly Things, we have reason to look upon it as something of an heavenly, exalting and glorious Nature, as that which disperfes Death, Darknes, and Grossness, and raises up the Power and Glory of every Life."

"THERE is but *one Fire* throughout all Nature and Creature, standing only in different

ferent States and Conditions. The Fire that is in the *Light* of the Sun, is the same Fire that is in the *Darkness* of the Flint. That Fire which is the Life of our Bodies, is the Life of our Souls; that which *tears* Wood in Pieces is the same which *upholds* the beauteous Forms of Angels. It is the same Fire that *burns* Straw, that will at last melt the *Sun*; the same Fire that brightens a *Diamond* is darkened in a *Flint*. It is the same Fire that kindles Life in an Animal, that kindled it in Angels. In an Angel it is an eternal Fire of an eternal Life; in an Animal it is the same Fire brought into a temporary Condition, and therefore can only kindle a Life that is temporary; the same Fire that is mere Wrath in a Devil, is the Sweetness of flaming Love in an Angel; and the same Fire, which is the majestick Glory of Heaven, makes the Horror of Hell."

CHAP. IV.

Shows that the Systole and Diastole of the Heart is caused by Fire, and that Fire is the Cause of the Redness of the Blood.

IN the last Chapter I gave a Quotation from Mr. LAW, in this I shall give several, but short, from JACOB BEHMEN, as a Prelude to what I have further to advance. In his Clavis at the End of the Forty Questions concerning the Soul: Verse 98. *In Fire and Light, saith he, consisteth the Life of all Things, let them be insensible, vegetable or rational Things.* In the Threefold Life, Chap. viii. Ver. 31. *Every living Life is a Fire: And yet the proper Source of the Fire is not the right Life, but the Tincture which proceedeth from the Fire is a pleasant Joy, and it is the Liberty of Nature, which is the right Life.* But to make this plainer by another Quotation, lest the Word *Tincture* should not be easily apprehended; in the 10th Ver. in the 17th Question concerning the Soul. *The Fire, saith he, is wrathful, the Light is mild and lovely: In the Light is the Life,*
and

and in the Fire the Cause of the Life. But this Life (speaking of the natural Life, Three-fold Life, Chap. viii. Ver. 34,) is fragile and consisteth only in four Forms, viz. in Fire, Air, Water, and Earth, which is its Body. In the seventh Question concerning the Soul, Ver. 16. As to the Soul only, beside the Spirit, it is a Globe of Fire. And in the ninth Question, Ver. 2. the Soul standeth in the Blood of the Heart, there it hath its Seat and Original. In the first Question concerning the Soul, Ver. 134. Understand the great Mystery further. You see that every Fire giveth Light, and you see also that Air goeth forth from the Source of the Fire, and you know very well that if the Fire had no Air to blow it up, it would be smothered, as all Fires are smothered when they have no Air, and yet they produce Air. Ver. 136. You see that all Fire must have Matter or else it will not burn; understand it thus, the Fire produceth Air and in the Air, Water, and it mightily attracteth the Air with the Water into itself again, whereby the Source of the Fire is so allayed that it shineth, for without Water no Fire shineth; if no Water can be produced in a Thing, in that Thing the Fire will not shine. In the

Book

Book of Regeneration, Ver. 19. *Who would believe that Fire generateth Water and that the Original of Fire could be in Water, if we did not see it with our Eyes in Tempests of Thundering, Lightning and Rain; and did not find also that in living Creatures the Fire in the Body dwelleth in the Blood, and that the Blood is the Mother of the Fire, and the Fire the Father of the Blood.*

BUT BEHMEN hath gone much deeper than this, even to the Properties antecedent to Fire, which is before shown in Chap. II, and proved by Experiment the first. But I would here ask, what is that Heat and from whence does it proceed, that warms the Body, and by which so long, but no longer than it warms, the Limbs are enabled to perform their Offices? Shall I be answered, it is the Blood that causes this internal Warmth by its *Velocity*, *Friction*, and *Attrition* through the Veins and Arteries. But then what causes this rapid Circulation? There must be some Power to put the Blood in Motion. Experiments now have fixed it beyond all doubt that it is *Fire*, the *Fire* of which every rational, Animal and Vegetable Life consists. But look back to Chap. II.

Expe-

Experiments the first and second, and there you will see how the three first Properties of Nature work, which are antecedent to Fire. The electrical Machine exhibits to our Senses, that there is a continual Influx and Efflux, and that these two Opposites always acting contrary to each other cause a Whirling or Circulation, and that this violent Motion produceth Fire. So that wherever there is Fire, there is always *a going in and going out* and a *whirling round* or Circulation.

Now what Difficulty after seeing these Experiments, by which are shewn the Manner of Nature's working, to account for the Systole and Diastole of the Heart; for if the Soul is a Fire, and from whence can Heat come, but from Fire; and if its Seat is in the Blood of the Heart, as BEHMEN declares, then so long as the Soul continues therein, there must be an Attraction, Repulsion and Circulation.

MANY had imagin'd that Fire was the Cause, because they could not tell how to account for Motion without it, but then not knowing the Nature of Fire, or that there were any Properties in Nature antecedent to it, the more they attempted an Explanation,
the

the more they found themselves embarrassed, till at length others resumed the Subject and attempted to explain the Systole and Diaſtole of the Heart from the Preſſure of the Atmosphere, but with as little Succeſs, for all proceeded on doubtful Hypotheſes. But what need of Suppoſition now? An electrical Machine ſhows us the Manner of Nature's Working. It maniſeſts the hidden and inviſible Fire to our Senſes. And by trying Experiments either on the vegetable or human Syſtem, we ſhall find the Fire, of which the Life of each conſiſts, to be the ſame; for if it was a ſtrange and heterogeneous Fire, it would exceedingly injure the human Frame and not aſſiſt it; it would not mix ſo kindly as it does with the Blood, but would rather cauſe an Ebullition in it, and do the greateſt Harm to the Conſtitution, whereas nothing of this is ſeen. The only Alteration that can be perceived, is, that it acts as a Stimulus and quickens the Motion of the Blood. The Pulſe beats a few Times oftener in a Minute. But the Variety of Cures that Electricity has performed, ſpeaks more ſtrongly and loudly for this Aſſertion, than all that I can poſſi-

D

bly

bly say in Support of it. I wish I could as easily prove, to prevent the Critic's Cavil, what I am going further to advance on the Subject, viz. that the Redness of the Blood, which has puzzled so many, is caused by *Fire*. But what so probable? If all Colours are found by Experiments to be contained in Light, and if we know of no Light without Fire, to what else can we with so much Reason attribute the Redness of the Blood? A better Cause I have never yet met with, but if any one can show a better, I will readily and chearfully give up my Conjecture. But alas! how little do we know! What Reason have the wisest Men to deplore their Ignorance! What a Mystery is *Fire*! Who thinks that his Life consists in *Fire*! How unknown is Man to himself! But such we see is the Force of some Mens' Fire, that it drives them into Depths deeper than they can fathom. How many hundred Books have been written that now no one thinks worth the Perusal? How many Volumes hath a plausible Hypothesis produced, all which the next Age hath seen converted to waste Paper? An Hypothesis however pleasing, cannot stand long. Busy Imagination

tion is always at work to pull it down, and build something of its own, but not more durable, on its Ruins. But I here put an End to this Digression, if it be a Digression, and proceed to the next Chapter to show the Usefulness of Experiments.

C H A P. V.

Shows the Sentiments of Mr. BOYLE, and Dr. BOERHAAVE, respecting Mens' Ignorance of Nature, also proves that Sir ISAAC NEWTON was a Reader of BEHMEN, and borrowed from him his two Powers of Attraction and Repulsion, and concludes with the Remarks of the ingenious Dr. WATSON on Electricity.

MR. BOYLE in his Tenth Essay “ of Mens' great Ignorance of the Uses of natural Things,” begins his first Section with these Words: “ I consider in the first Place, *That there are very few of the Works of Nature that have been sufficiently considered and are thoroughly known, even as to those Qualities, and other Attributes of this and that Body (or other Physical Thing) which be-*

long properly to it, and are not thought to be so relative to other Bodies. 'Tis not only in the Terrestrial Globe, but in almost every Body to be met with in it, that there may be a Kind of *terra incognita*, or undetected Part, whose Discovery is reserved for our future Industry."

Now this *terra incognita*, this undetected Part, no Man more industriously strove to find out, than Mr. BOYLE; he spent his Life in trying Experiments, fully convinced that they were of the last Importance to investigate Nature. Of this same Way of thinking was the great BOERHAAVE. In an Oration 1725, on the Method of obtaining Certainty in Physics, he asserts, that "we are entirely ignorant of the first Principles of Things, and that all our Knowledge of their Qualities is deriv'd either from such Experiments, as subject them to our Senses, or from Consequences by an exact Method of Reasoning deduced from those Experiments."

BUT no one was more convinced of the Utility of this Method than Sir ISAAC NEWTON. But had such Improvements in the Electrical Apparatus been made in his Days
as

as have been made in these, what would it not have enabled him to do? It would have helped him to demonstrate to the Sight, his *attractive and repulsive Powers*, and saved him the Labour of writing so much about it, and which but very few Capacities have been able to comprehend. Sir ISAAC had doubtless an uncommon Genius; but shall we say he was Self-taught with Regard to his Doctrine of *Attraction and Repulsion*? Mr. LAW knew otherwise, and was not afraid to tell the World that he had it from JACOB BEHMEN. “ The illustrious Sir ISAAC NEWTON, says he, § when he wrote his *Principia*, and published to the World his great Doctrine of *Attraction*, and those Laws of Nature by which the *Planets* began, and continue to move in their Orbits, could have told the World that the true and infallible Ground of what he there advanced, was to be found in the *Teutonic Theosopher*; in his *Three first Properties of eternal Nature*, he could have told them that he had been a diligent Reader of that wonderful Author, that he had made large Extracts out of him, and could have referred to him

D 3

for

§ Animadversions on Dr. TRAP's Reply, p. 314.

for the Ground of what he had observed in the Number *seven*. Now why did not this great Man do thus? Must we suppose that he was loth to have it thought, that he had been helped by any Thing that he had read? No : It is an unworthy Thought. But Sir ISAAC well knew, that Prejudice and Partiality had such Power over many People's Judgments, that Doctrines, tho' ever so deeply founded in, and proved by all the Appearances of Nature, would be suspected by some as dangerous, and condemned by others, even as false and wicked, had he made any References to an Author, that was only call'd an Ethusiast." I have not made this Extract to depreciate Sir ISAAC NEWTON: He was doubtless the *great Man*. But he certainly borrowed his attractive and repulsive Powers from BEHMEN; for had he been possessed of Instruments, as we now are, by which he could have clearly shown them, he would not have been silent; but it is too plain he was unwilling to declare from whence he had his Knowledge; whereas BEHMEN honestly and without Disguise openly declares he derived his Knowledge from GOD. And who but GOD, the Au-
thor

thor of Nature, can unfold the Laws of Nature !

Now after having mentioned Mr. BOYLE, Dr. BOERHAAVE, and Sir ISAAC NEWTON, it would be doing Injustice to my Subject not to mention the ingenious Dr. WATSON, who has written on Electricity both in the experimental and medical Way, the Result of whose Enquiries I find drawn up ready to my Hand in a Dictionary lately published under the Article of Electricity. “ Mr. WATSON’s System naturally leads him to ask, by what Denomination shall we call this extraordinary Power from its Effects in these Operations? Shall we call it Electricity from its being a Principle neither generated nor destroyed, from its being every where, and always present, and in Readiness to show itself in its Effects, tho’ latent and unobserved, ’till by some Process it is produced into Action and rendered visible from its penetrating the densest and hardest Bodies, and its uniting itself to them; and from its immense Velocity shall we with THEOPHRASTUS, BOERHAAVE, NIEUENHIT, GRAVESAND, and other Philosophers call it elementary Fire? Or shall we from its con-

taining the Substance of Light and Fire, and from the extreme Smallness of its Parts, as passing thro' most Bodies we are acquainted with, denominate it with HOMBERG and the Chymists, the chemical sulphureous Principle, which according to the Doctrine of these Gentlemen is universally disseminated? Whatever we call it, it seems certain that this Power has many surprizing Properties, and cannot but be of great Moment in the System of the Universe."—This is by far the best and most sensible Observation I have ever met with on Electricity. The *terra incognita*, or *undetected Part* so long sought for unsuccessfully by Mr. BOYLE, has fortunately been hit upon by Dr. WATSON. The Power call'd Electrical (and to which insignificant Term we are obliged to submit thro' Custom,) is indeed of the greatest Moment in the System of the Universe. This I have already demonstrated by several clear and convincing Experiments. I would only here further observe, that this Power or Principle is of a Truth every where tho' unobserved, and that it is not then generated when made visible by Experiments, any more than Fire can be said to be generated from

from the Collision of a Flint and Steel ; for was there no Fire within them, we might strike for ever, but not produce it.

CHAP. VI.

Treats of the Number Seven, and of the frequent Mention of Fire in the Scripture, shows from whence the Fire shall come, that will cause the last Conflagration, and concludes with a serious Address to Infidels.

IN the Scripture Sense *seven* is a Number of Perfection. The frequent Mention of it in the divine Law and Revelation is doubtless allusive. In *seven Days* the Creation of the World was finished. The Leper was to be sprinkled *seven Times*, and *seven Days* were appointed for his Cleansing. *Seven Days* were appointed for consecrating the Priests, and *seven Days* for purifying the Unclean. *Seven Priests* with *seven Trumpets* blew *seven Days* for the overthrowing of the Walls of *Jericho*. *Every seventh Day* was a Sabbath. *Every seventh Year* a Year of Rest. And *seven times seven Years* brought the Jubilee.

IN

IN the Revelation, Chap. v. Ver. 6, are these Words. *And I beheld and lo in the Midst of the Throne and of the four Beasts, and in the Midst of the Elders stood a Lamb as it had been slain, having seven Horns and seven Eyes, which are the seven Spirits of GOD sent forth into all the Earth.* Mention is likewise made of *seven Candlesticks, seven Churches, seven Seals, seven Trumpets, and seven Phials.*

AND now from Experiments our Senses are convinced that there are seven Properties in Nature, all wonderful in Operation, and of such Force and Power that nothing can resist them. From the Clouds we see them burst in destructive Lightning; and it is even in our Power to arrest and collect such a Quantity that no one can approach safely to it. But from the Jars that are generally made use of, nothing hurtful can possibly happen; but even from these a Man will be convinced that there are such Powers in Nature of which he had not the least Conception.

IN the Scripture likewise frequent mention is made of *Fire* and *Light*, the one to express the *Terror* of the LORD, the other to

to set forth his *Glory*. The first Revelation GOD made of himself, to MOSES, was by *Fire*. The *Israelites* were guided in the Night, in the Wilderness, by a Cloud of *Fire*. When the Law was given, the LORD descended upon the Mount in *Fire*. A continual *Fire* Night and Day was to be kept up in the Temple. The Holy Ghost descended upon the Apostles in the Appearance of cloven Tongues of *Fire*. PAUL going to *Damascus* to persecute the Christians was struck to the Ground by a *Light* far exceeding the Light of the Sun. Many more Passages might be mentioned, but these are sufficient to show that *Fire* is the great Agent of the Deity.

Now Experiments discover to us that *Fire* is every where and in every Thing; and that even we by the Help of Instruments can call it forth from its Hiddenness, and either make it act as a Friend or as an Enemy to the human Frame.

BUT now if we can do these Things with it, what cannot be done with it by Him, who created it? Cannot GOD make it act either as a Minister of Love, or as a Minister of Vengeance? *Sodom* and *Gomerrah* felt it
as

as a Minister of Vengeance. The three *Jews* that *Nebuchadnezzar* ordered to the burning Furnace as a Minister of Love.

NEED we now any longer spend our Time in conjecturing from whence the Fire shall come, that shall cause the last Conflagration? Some have supposed that it will come to pass by Fire from Heaven. Some that there is a central Fire, and that it will burst from thence. And others that it is more likely to happen from a fiery Comet. But all these are weak Conjectures and cannot be supported. But Experiments have now freed us from these Perplexities; they discover and manifest to our Senses such Plenty of Fire, that we know of no Place, nor any Thing in which it is not to be found. The Reason why we cannot discern it without the Help of Instruments is, because we are on the *Outside* of its *Covering*. It is covered and hidden just as the *Soul* or *Life* is covered and hidden in the Body. Now as we know of no Part of the Body in which the *Life* is not present, so an electrical Machine discovers to us that *Fire* is every where as intimately mix'd. By the Help of this Instrument we can look into the *Inside* of Nature

ture and see the Manner of its Working. Sometimes I have been enabled to raise so much Light by it, that this Thought has struck me, " Could the Covering be removed what a glorious Shine would there be throughout the Universe !"

I CANNOT conclude this Chapter without a Word to those Persons, who over-rating their Understanding, often make themselves merry with the Credulity of Christians, who believe that this World shall be burnt and purified by Fire.—To These Faith is the Evidence of Things not seen.—To you, who have no Faith, Conclusions drawn from the silly Conjectures of weak Men, are the Ground and Support of your Unbelief. But will you believe your Senses? Will you let them determine the Point? Try Experiments! An electrical Apparatus will convince you that Fire may be collected in every Place, which Fire you will find to be the same as that, which bursts from the Clouds in Lightning, the same as that which we make use of for all the Ends and Purposes of Life. You will find too by receiving a smart Shock from a charged Jar, that there are Powers in Nature of which you
had

had not the least Idea. Now if you yourselves with the Help of proper Instruments can call forth the hidden Fire and perform Wonders with it, what shall not He do with it, who is its Creator, and who now rules and directs it? You cannot, I think, therefore, after such Discoveries as these, treat Christians with Contempt for believing, what has been revealed to them in that Book, which they hold in the highest Esteem, but which you look upon as a Book of Fictions.

BUT if my Memory does not deceive me, I have read somewhere in the Philosophical Transactions, two or three Accounts of the internal Fire breaking forth in the Body and consuming it, nothing of which was left, but just enough to convince the Beholder that it was consumed by Fire. Now why may not the internal Fire of the World shake off its *Covering* in the same Manner. When GOD orders, it will do so. The Floor will then be thoroughly purged, the Chaff and Wheat will then be separated, *id est*, the Good and Bad, Believers and Unbelievers, will have a distinct Abode. One in an unquenchable Fire without Light, where the Worm dieth not. The other in a State of
Light

Light and Glory, where the *Fire* has no such consuming *destroying Power*, as we see it has here, but where it changes all Creatures into *Flames of Love*. You may conceive this from hence. Separate in your Imagination the first four Forms of Nature, in Chapter the Second, from the three last: Now in these Forms the Creature (for such as Nature is, such must be the Creatures that are in it) the Creature, I say, can feel nothing but a continual Strife of opposite Powers contending with each other. This is the miserable State into which Devils are fallen; and in which they are shut up in Chains of Darkness. Their first State of Light and Glory, which consisted of all the seven Forms of eternal Nature harmoniously working in one blessed, glorious Union, they have changed for their present dark Abode, that only consists of the opposing Forms always striving and contending with each other, and into which they can no more bring Light than the extinguished Taper can re-enlighten itself; now this horrid, this State beyond Description miserable, must be yours, if you die refusing the Light of GOD.

YOUR

YOUR Soul in her present fallen State consists of no more than the four first Forms of eternal Nature; and the Reason why you do not feel the Misery of this wretched State is, because of the Light and Water of this World with which its Anguish is allayed and asswaged; but when Death shall separate your Soul from these, then all the Wretchedness of that horrible State will be awakened in you.

You feel something of this even now under the Cover of Flesh and Blood; all the Uneasinesses that arise in your Breast, every distressing Thought, that disturbs your Quiet, and take Notice, *Discomposure* as well as *Peace* of Mind arises from within, all I say issue from the State your Soul is in; for were you in that State of Rectitude, in which you foolishly suppose yourselves, you could not have an uneasy Moment; nothing could possibly stir up the least Anxiety within you. Whatever you feel therefore not right, is a *Proof* to you of the *non-rectitude* of the State you are in. And if you cannot make that strait, which is now crooked, if you cannot alter Nature and make it better whilst in this State, you have no Certainty that it will be better in another. BUT

BUT perhaps you may be intoxicated with that vain Thought, that when we die we are annihilated. I have shewn you by the Help of an electrical Apparatus the hidden Powers of Nature and the Manner of their Working, now if these can be annihilated, then no doubt all Nature and every Creature will be annihilated, for Nature is prior to the Creature. But if this cannot be shewn or any Ways proved, such a Belief undoubtedly argues more Credulity in the Believer than ever yet existed in the weakest Christian. But do you suppose that Fire is annihilated, when you extinguish it? Cannot you raise and make it visible in the same Thing, in which it was extinguished? What a *Proof* then have you always before your Eyes of the *enduring State of Fire*, and that, when it is extinguished, it is not annihilated, but only retired under Cover, from whence it is in the Power of any one to bring it again and make it visible! When you put out your Candle the Fire becomes invisible, the Wax or Tallow is its Covering, and it lies in it in a dead inactive State; but how soon can you call it forth! As Fire therefore cannot be annihilated, and as every Life, as

E has

has already been shewn, consists of Fire, what a Proof is this of the ever-enduring State of the Soul !

By this Time, I hope I have driven you out of your Entrenchments, and left you no Refuge but the Mercy of an all-forgiving GOD, who, tho' you reject his Revelation and will not have his Son reign over you, is yet willing that you should come to the Knowledge of the Truth and be saved. He is very loth that you should die unsaved and undelivered from the Power of Darknesh. He would, if you will suffer me to address you in a Scripture Phrase, translate you from the Kingdom of *Darknesh* into the Kingdom of his *dear Son*; *id est*, he would send his Light into your Soul and fill it with *Joy*, *Peace*, and *Glory*. But should you vainly depend on your rational Powers; as an extinguished Taper that cannot light itself, so will it be with your Soul. The Light that was extinguished in her by the Fall, can never be rekindled by any Power, but GOD; but the Offer of this Union is daily and hourly made you, and will never cease to be offer'd, 'till with your last Breath you die refusing it.

OH !

OH! that I had but Words with which I could penetrate your Hearts, and make you feel the Wretchedness of your State! I have demonstrated to you that the unquenchable Fire is no Chimera. I have shewn that it exists both within and without you. I have made known to you many Experiments, from which this Truth may be deduced; and which the hardiest Infidel cannot deny. Had I only laid my Foundation on a weak Hypothesis, and raised a foolish Building upon it, as too many have done, who have contended with you, a small Part of your Artillery would have been sufficient to have demolished it; but now you may as well deny that the Sun shines at Noon-Day, as that *Fire* is not every where and in every Thing. Too many who have entered the Lists with you, have had no firmer Ground to stand upon than yourselves; this is the Reason, that hitherto, tho' not Conquerors, you have shouted *Victory*. But I hope for the future no Christians will be so weak as to contend with you about Words, which the Wit of Man tortures as it pleases. Nothing has hurt both you and the Cause of Christianity so much as this. I find the

Saviour of the World disputing with no Man. When he delivered his great Truths and unheard of Doctrines, he only added, *He that bath Ears to hear let him hear.* Disputes, I am persuaded, do harm to the Contenders. Few enter the Field without being worsted. Bitterness is awakened in the conquered, and Pride lays hold on the Victor.

C H A P. VII.

Shews that Electricity comes the nearest to a Panacæa of any Medicine yet discovered, explains the electrical Shock, and describes a Planetarium, that beautifully shews the Revolutions of the Planets.

IMAGINATION has deceived many with the Thought that there is in Nature a Panacæa, but hitherto it has been searched after without Success. Electricity bids the fairest for it of any Medicine yet discovered. No one can positively say what it will not cure: And yet I am not such an Enthusiast as to imagine that it will remove every Disorder

order incident to the human Body. But the many Disorders I have seen it cure, if it has not gain'd my Belief in it as a Panacæa, yet has amazed and astonished me beyond Expression.

If it be allowed that our Disorders arise from Obstructions, nothing was ever found out so innocent, and yet so powerful to remove them. From hence may be accounted why it has instantaneously cured Disorders of long standing, and from which the Patient has suffered most excruciating Pain.

BUT perhaps an Objection may here be made, that I call that innocent in this Place, which in another I have said may be hurtful. That no Medicine of such surprizing Efficacy was ever discovered, and of so innocent a Nature, I have for many Years experienced, and therefore can speak with Certainty. Hurtfulness I never saw issue from it, but that it may be made hurtful, I have not the least doubt. A large Quantity collected once by Mr. FRANKLIN, as he was trying Experiments, burst unawares from the Jars and struck him to the Ground. The same Quantity doubled would doubtless have killed him.

BUT from an Apparatus calculated for medical Purposes, I mean where the Jar or Bottle made Use of contains no more than *two Quarts*, it is impossible to receive the least Injury, even from the Hands of the most ignorant.

I HAVE often in trying Experiments received many very severe Shocks, but never perceived the least Hurt ; nay I have sometimes found myself better and more lively.

STRANGE Objections have indeed been made to Electricity, nay and what is more strange, by Persons, who never saw a Machine. But *Truth* gains Ground slowly, the Reason is, it has *Ignorance* and *Prejudice* to combat in the Way.

I WILL now attempt to explain what causes the Shock or that Stroke, which we feel when electrified.

By Experiments the First and Second, Chapter the Second, the Eye has clear Proof that there are in Nature two Powers diametrically opposite to each other ; these Powers never cease working after this Manner, but the Opposition brings forth another Motion, viz. a whirling round ; now whoever comes within the Circle made by a Chain or Wire,
between

between the Bottom and Top of a charged Jar, will feel a Shock or Stroke as if a Stander-by had struck him. This Stroke manifestly comes to pass from the two contending Powers; for passing contrary Ways with such sudden Swiftnefs and Power thro' the Body, they distend the Vessels; which sudden and quick Distention causes the Sensation so much like an unexpected Blow. But small Animals, kill'd by Electricity, shew this beyond Contradiction. Their Vessels, being too tender to bear the Power of the Shock, immediately burst.

I WILL not conclude this Chapter, without first imparting the Invention of a Planetarium, that curiously shews the Motions of the Planets.

I HAVE a round Table, the Diameter of which is near three Feet, the height twenty Inches; on the Middle of this Table, I place a round well polished Plate of Pewter, of the Diameter of eighteen Inches; on this Plate I place six Orbits of Brass, but fastened to one another, and in such a Manner, that six Glass Balls, of about three Quarters of an Inch Diameter, can easily run between the Orbits. Under the Edge of the Outside

Orbit, I put four Supporters of Sealing-Wax, to raise the Orbits above the Pewter Plate, so that the Glass Balls may just touch the inside Edges of the Orbits, and may have nothing to hinder their revolving. Over the Orbits, about the Distance of two Feet, I suspend a Copper Globe gilded, of about nine Inches Diameter, to represent the Sun, from this I fasten to one of the Orbits a Wire, as small as an Hair, then by Means of another small Wire, reaching from the Conductor to the gilded Globe, I communicate the Fire to it; from the Globe it passes by the Wire to the Orbits, and from the Orbits to the Balls, which being caught between the contending Powers are put in Motion and driven round swiftly between the Orbits. But at the same Time that they run between the Orbits, they also revolve on their Axis, so that two Motions are communicated to them; and besides this, one half of the Balls is illuminated.

BUT could the Machine in this Experiment be kept out of Sight, the Beholders would be greatly astonished; but whilst they see the Apparatus, they are apt to conclude, that that is the Cause, whereas the Machine

is

is only instrumental. The hidden Powers of Nature are the Cause, which are clearly shewn by this Experiment, and made more easy to be comprehended. For here a Man will naturally ask himself, what is the *Power* that puts the Balls in Motion, and what is the *Light* that illuminates them?

BUT I must here give a Caution to inform the Reader, if he has an Inclination to try this curious Experiment, that unless he warms the Pewter-plate, before he begins, his Labour will be in vain. The want of knowing this, cost me much fruitless Trouble. Some Persons, from making one and sometimes two Balls revolve, had positively, but erroneously asserted, that they could make many; but I found no such Thing; and others, who attempted to make more revolve, have candidly confessed to me their Inability. At first I thought it was owing to the Want of more Fire, or that *this* was wrong, or *that* not right, 'till at last warming the Plate, I succeeded according to my Wish.

THE Glass Balls I found condensed the Air upon their Surface, and became moist, by which Means the Fire escaped; but

when the Plate was warmed, this counteracted the condensing Power of the Glass, and then the Balls revolved with very little Fire. But Care must be taken, that the Balls are not heavier in one Part than in another.

HAVING now shewn by Means of a simple Instrument, unmeaningly called an electrical Machine, how the hidden, but wonderful Powers of Nature, may be made visible to the Senses, I will relate a few Cures, selected out of many, as a corroborative Proof, that we are now arrived at the Knowledge of those Arcana, that many have searched after, but for want of proper Instruments, could not discover.

C H A P. VIII.

Contains several and various Cures performed by Electricity, viz. 1. Hysterical Fits. 2. Hemiplegia. 3. Tertian Ague. 4. Swelled Arm from Bleeding. 5. Loss of Sight. 6. Pains and Swellings. 7. Wrenched Knee. 8. White Swelling. 9. Scalds and Burns. 10. Erysipelas. 11. Weakness and Loss of Strength from Lying-in. 12. Rheumatic Pains. 13. Decay of Sight. 14. Sciatic. 15. Violent Contusion from a Fall. 16. Tertian Ague. 17. Numbness. 18. Rheumatic Pains. 19. Distorted Hand. 20. Loss of Limbs after Lying-in. 21. Pain in the Back caused by frequent Miscarriages.

MY Servant Ch*** P**** had many Years been afflicted with Hysterical Fits. In 1761 I sent her an Out-Patient to the Infirmary, which she attended several Months, but to Appearance without the least good Effect. Her Fits encreased and her Constitution seemed much weakened. At last I proposed Electricity to her. She received several Shocks, but not the least good

good or ill Effect could be perceived from them. Thinking with myself that I might have given the Shocks at an improper Season, I changed the Time, and gave them to her when the Fit was upon her. The Effect was astonishing. The Fit ceased. The Convulsions were quieted, and she was enabled in five Minutes to go about her usual Work; whereas when the Fit was left to itself, it weakened her so much, that it was sometimes near two Days before she recovered that little Strength, that the Fits had left her. I pursued this Method. Her Fits gradually lessened, and at length ceased. But I must here inform the Reader, that in the Spring 1762 I advised her to use the cold Bath, which did her much good. This she has continued every Summer since, and at the writing this, *December 24, 1764*, she continues in perfect Health, and has had, from her own Account, but six Fits, and those chiefly from Surprize, since she left off the Use of Electricity, which was from the Time of her first using the Cold-Bath.— I passed the Shocks through the Heart, and from the Right Shoulder to the Left Side, and then from the Left Shoulder to the
Right

Right Side. When she was much convulsed I passed the Shock from the Left Hand to the Right Foot, and then from the Right Hand to the Left Foot.

CURE II.

JOSEPH BURGESS, aged 22, applied to me in *February*, 1761. Two Years before, returning from Sea, he was impressed into the King's Service, in the *Bristol* Channel, and with several others was sent to navigate a Prize round to *Plymouth*. He had not been long on board, before he was struck with an Hemiplegia on the Right Side. When the Vessel arrived at *Plymouth*, he was sent to the Hospital. He continued there, his Mother informed me, three Months, without receiving the least Benefit. She then removed him to *Bristol*, and by the Help of Friends got him admitted into the Hospital at *Bath*, where he remained seven Months, but to no Purpose. She then removed him back to *Bristol*, and got him admitted into the Infirmary, where he continued three Months, and was then dismissed as one incurable. Some Time after this his Mother applied to me; at this Crisis his Right Leg was

was almost useless, he had no Strength to lift it up, he could only drag it after the Left. His Right Arm was withered, and seemed only to hang to his Shoulder, and his Fingers were fast clenched and quite inflexible. Neither was he able to speak one articulate Word.

I GAVE him thirty or forty smart Shocks for several Mornings, and had soon sufficient Reason to think that I should be of Service to him; for the Parts, which were at first insensible, began to recover their Feeling, his Fingers unclenched a little, and looked of a living Colour. In two Months his Leg recovered so much Strength that he could walk with Freedom; and I could perceive the Flesh of his Arm grow and increase apace; by this Time he could lift it to his Head and move his Fingers. I ordered him to use his Arm as much as he could, and his Mother telling me he could pump with it, I directed him to exercise his Arm this Way as much as possible. In a little Time he recovered so much Strength that he was able to pump for half an Hour. He attended three Months, and then of his own Accord left me. His Flesh became sensible,

fenfible, and the Shocks gave him Pain. This was the Reason of his coming no more.

I HEARD of his going to work soon after, and that Mr. HILL had taken him into his Brick-Yard; but I faw no more of him after he left me, 'till the Day of my writing this Account, *February 4th, 1766*, when I took a Walk to Mr. HILL's Yard in *St. Philip's*, in hopes I fhould find him at Work. I met with one of Mr. HILL's Clerks, who told me he was then at work with feveral other Men digging and wheeling of Clay, and was fo kind as to go with me and point him out. I flood at a Distance fome Time, to obferve how he managed his Barrow, which he feemed to drive as quick as any of the reft, only I perceived he limped a little. I then went to him, and examined how he managed his Barrow. I found his Fingers ftill much contracted and very ftiff, but with the Help of a Strap round his Wrist, in which he made a Loop to put the Handle of the Barrow, he feemed to drive it before him with great Eafe. At this Time he earned four Shillings per Week, but in the Summer Five. And I was told that he was an honeft, laborious, induftrious Fellow. So
that

that now, instead of being to his Parents or the Parish an heavy Burthen, he had for five Years maintained himself. Before he left me he was able to speak yes and no very articulately; and his Mother this Day told me, that he could speak several Words very clear and distinct. Had he continued the Use of Electricity, I make no doubt but he would have been perfectly cured.—I often passed the Shock through his Tongue.

C U R E III.

IN *January* 1761, I was applied to, for two Children (Sons of Mr. CHANCELLOR, Taylor, in the Parish of *St. Philip and Jacob*, the eldest nine Years old, the other five) to electrify them on Account of a Tertian Ague; which had stubbornly resisted all Application. I order'd the Children to be brought to me just as the Ague was coming upon them; Experience having taught me that this is the only Time to give the Shock with Efficacy.

THEY were electrified only twice, and were perfectly cured, by passing thro' them four slight Shocks, two through the Stomach and two through the Sides.

IN

IN the *March* following one of the Children fell into the Water, and his Ague returned. He was brought to me again, but then the electrical Shock had not the least Effect.

CURE IV.

WILLIAM ROWE, Second-Mate of the *Gloucestershire*, aged about 40; in his Return from *Jamaica* was bled in his Arm, and from what ensued, seemed to have received an Injury from the Lancet, for his Arm between the Elbow and Shoulder immediately swelled, and gave him so much Pain, that he had scarce any Sleep for six Weeks. When he arrived at *Bristol*, Poul-tices and every necessary Remedy were applied, but the poor Man did not find the least Benefit; his Pain continued and prevented his Sleeping.

HE came to me *July 6, 1761*, he was then in great Misery. The Swelling was very large, and so hard that I could not make the least Impression on it with my Finger. His Hand was withering, and the whole Arm was so weak that he was obliged to rest it in a Sling, and button his Coat

F

loose

loose over it, for he had not been able for some Time to put it into the Sleeve.

I GAVE him between thirty and forty Shocks the first Time. The Night following he slept better than he had done from the Time of Bleeding, and said that the Pain was nigh taken off. I perceived the Swelling to be abated one third. I gave him the same Number of Shocks as I did the Day before; and, to my great Astonishment, when he went from the Machine, he took his Sling, which was a Silk Handkerchief, from his Neck, and put on his Coat with as much Ease as I could my own. He was perfectly cured in about three Weeks. I passed the Shocks chiefly thro' the Swelling, and from the Shoulder down to the Hand.

C U R E V.

IN *January* 1762, a poor Woman, whose Name is BETTY BUTLER, aged about thirty, came begging to my Door. She was almost blind. On Enquiry I found her Blindness was caused by a Blow with a Potatoe, about two Years and an half before. The Potatoe was flung with great Force, and struck her
in

in the Right Eye, with which she never remembered to have seen, owing to an Injury she received in her Infancy. But the left Eye, 'till that Accident, was always strong. An Inflammation immediately ensued; and when she came to me, the Right Eye was much swelled, and protuberated out of the Socket. The Anguish was very great, and so affected the Left Eye, that she had no more Sight left than just sufficient to go about to beg.

I took her to my Machine and drew some Sparks from both her Eyes, she seemed better before she quitted the Room, but by next Morning was considerably so. She told me she slept well all Night, which was what she had not done for some Time before, her Eye seeming to her always full of Sand, which prevented her Sleeping. After drawing Sparks from her Eyes, about ten Minutes at a Time, for four Mornings, she so far recovered her Sight that she could see to sew a whole Day together. In about five Weeks I dismissed her as perfectly cured.

BUT the following Spring she came to me, begging a Note to the Infirmary, telling me she wanted to take Physic, that it

was always her Custom every Spring. Her Eye was then perfectly well. I gave her a Note for an Out-Patient. She took Physic, but caught cold, on which she was seized with a violent Pain in her Head, which affected her Eye. She then applied to me a second Time. I treated her in the same Manner I did at first: But now it was to no Purpose. I then passed a Shock thro' her Head, but neither Spark nor Shock now seemed to have the least Effect. She was then taken into the Infirmary. She soon recovered of her Head-Ach, but her Eye grew worse under all that was applied to it. She begg'd her Dismission, and came to me. I then drew Sparks from her Eye the third Time, and it had the same Efficacy it had at first. She attended about ten Days, and has never had any Complaint in her Eye since.—*N. B.* The Time she was seized with the Head-Ach, was the Time the Influenza prevailed.

C U R E VI.

JOHN MEREDITH, a Journeyman Shoemaker, was rendered incapable of working from Swellings and great Pain in his Arm
and

and Leg. A Lady who saw him weeping over his Misfortunes, having many Mouths to feed, and no Strength to get any Thing for them, directed him to me; accordingly he came in *January*, 1762. I passed a few Shocks thro' the Swellings and the Places where he felt any Pain. In a few Days he was able to work, and in a Month was dismissed perfectly cured. I have met him several Times since, and he has told me he was very well.

CURE VII.

JOHN PAGLAR, Mason, being at work in *Redcliff-street*, *March* 1762, had the Misfortune, by carrying a Stone too heavy, to wrench his Knee; it swelled immediately, and was very painful notwithstanding it was instantly chafed with Spirits of Wine. He applied that Night to a Surgeon, who told him, he imagined it would be some Time before it could be cured. The next Morning he came to me, but with great Difficulty and much Pain. I passed about five Shocks thro' the Swelling, this enabled him to bend his Knee and walk about the Room without Difficulty. I ordered him to favour

his Knee that Day as much as he could, and come to me next Morning. He came, but perfectly cured with what was already done. The Swelling was gone, he could bend his Knee and walk as well as he could before the Accident happened. I saw him several Years after, and he told me his Knee had continued well ever since.

CURE VIII.

THE afore-mentioned Patient, overjoyed at his quick and unexpected Recovery, told many People as he went from my House what had befallen him, and how he was cured. The News reached Mrs. PRICE, Wife of Mr. PRICE, Blacksmith, in *Lime-kiln-Lane*, who was then confined to her Room by what an Apothecary, who was sent by a Lady in the Neighbourhood to look at it, called a White-Swelling; and judged too of a dangerous Nature. The poor Woman, stirred up by what the above Patient had related, begged her Neighbours to assist in conveying her to my House. She was accordingly brought in a Chair, for she had not the least Use of her Leg. I passed several Shocks through the Swelling,
and

and from the Knee down to the Foot. Her Pain, which was very great, was soon taken away, and in about a Month she was able, by the Help of a Crutch and Stick, to walk to my House. She was perfectly cured in three Months. I saw her several Times after, and she seemed to walk without the least Difficulty. But about two Years ago she called at my House to thank me, and then told me, she had walked the Day before ten Miles, and that she had not found the least Swelling in her Knee from the Time I dismissed her.

CURE IX.

IN the Beginning of *March*, 1763, my Cook-Maid S*** W***, had the Misfortune to scald her Arm from the Wrist to the Elbow. I was not informed of it 'till two Hours after the Accident. When I saw her Arm, there was one very large Blister already risen, and several small ones were rising all over the scalded Part. I drew Sparks from every Part of the Scald, for about the Space of five Minutes. She was much easier and able to go to the Fire and do her Work. In the Evening I repeated

the drawing of Sparks from her Arm about ten Minutes. By next Morning all was quite healed; there was not the least Appearance of a Blister, nor could the least dead or shrivelled Skin be seen, but where the large Blister had risen. She said her Arm was quite easy, and the same as if it had not been scalded.

I discovered that drawing Sparks would cure Burns or Scalds from my little Boy, who before he could well speak, had the Misfortune to thrust his Arm against an Ironing-Box in the Landry. The Child cried much, but was averse to have any Thing put to it. I said I would electrify him, this he consented to, for he was fond of seeing the Machine. I drew a few Sparks from the Burn and heard no more of it. This convinced me; but he soon after afforded me another Proof. Standing by the Fire unobserved, he put a little Cane into it, and then drew it thro' his Hand, the Middle of which appeared much burnt. I drew Sparks from it, and the next Morning it was quite well.

CURE

C U R E, X.

APRIL 2, 1763, my Wife walk'd too long, as appeared by the Consequence, in the Evening in the Garden. Next Morning an Erysipelas appeared in her Face. Her Chin was swelled, inflamed and full of small Pustules. By Night the Swelling had reached her Right Cheek, and was proceeding to her Neck and Forehead. Her Right Eye seemed to be closing up, and her whole Face was very sore and painful; she found also a Sickness at her Stomach. She asked, if I did not think drawing Sparks from her Face would be of Service to her? I drew Sparks from it for about ten Minutes. The Inflammation instantly stopped, the Sickness went off from her Stomach, and the Soreness was much abated. She could bear now to press and rub it. Next Morning all her Face and Head was a little swelled; but drawing Sparks about five Minutes at a Time, Night and Morning for five Days, perfectly cured her. She has never had the least Appearance of an Erysipelas since.

CURE

C U R E X I.

ABOUT this Time MARY SCRIVEN, the Wife of a labouring Man at *Henbury*, in *Gloucestershire*, applied to me. Her Complaint was a fixed Pain in both her Arms, which had deprived her of the Use of them. The Flesh of both was much wasted. One of them she could not move from her Side, and the Pain was so great that she had no rest Night nor Day. Her Appetite too was quite taken away by it.

By passing about twenty Shocks for a few Mornings thro' the Parts where she felt any Pain, it was so far taken off that she began to have good Nights, and her Appetite mended daily. In less than a Month she was able to raise her Hands to her Head, and under-hand she could lift a Pail of Water as high as her Knees, do many Necessaries about her House, and dress her young Child, which was her seventh living, and in lying-in with which her Disorder came upon her. In two Months the Flesh of her Arms recovered its Colour and looked healthy, and visibly filled up and encreased apace. She came to me at Times for six Months, stay-
ing

ing away at Intervals a Fortnight, and some times three Weeks.

I WILL not say she was absolutely cured by Electricity. Her Disorder was of the relaxed Kind. She could do any Thing under but not over-hand. I advised her to try the Effect of pumping cold Spring-Water upon her Arms and Hands. It did good. But fortunately a Neighbour advised herto flake a Lime-stone in Water, and wash her Arms and Hands with it. This effected a perfect Cure. And the last Time I saw her, which was above two Years after, she told me she was so well that she had stood the Week before five Days to washing.

CURE XII.

MARY BARTER, a Nurse, applied to me likewise about this Time. By sitting up, and catching frequent Colds, she had lost the Use of one Arm, and yet she had had all the Assistance Physicians and Apothecaries could give her. A few Shocks took off her Pain and in six Weeks she was perfectly cured. But in about a Year and an Half after, from repeated Colds, her Pain returned again, but not so violent. In three Weeks

Weeks she was dismissed a second Time as perfectly cured. In about five Years after she applied to me a third Time. The Pain had then shifted to her Knee and Leg. She was treated in the same Manner, and the same good Effect followed. She has none of these Complaints now in the Beginning of the Year 1771.

C U R E XIII.

IN the Spring of the Year 1763, a Lady was much perswaded to try the Effect of Electricity for her Sight. It had been gradually decaying for some Time. A Film could be perceived gathering over the Iris, and making its Way to cover the Pupil. One Eye in particular was so darkened that she could not see with it either to read or thread a Needle.

I DREW Sparks from her Eyes about the Space of three or four Minutes every Morning for a Fortnight. She found her Eyes surprizingly mended; and those who stood by could see as it were the Curtain draw back from the Pupil and Iris. She attended afterwards at Times six Weeks longer, and when she left me was able to thread the
finest

finest Needle, and to read the smallest Print.

CURE XIV.

THOMAS FRANKLAND, an Invalid, but discharged on Account of what was thought an incurable Malady, was seized with a violent and most excruciating Pain in the upper Part of his Thigh. It had tormented him for three Months before he came to me, and had rendered his Life perfectly miserable, depriving him of all Rest Night and Day. He was cured by electrifying him only twice. I passed about six Shocks thro' the Pain. This poor Fellow's Gratitude was so great that, at whatever Distance he saw me, he would always run and be ready to throw himself at my Feet. I have not seen him now for several Years.

CURE XV.

JANUARY 20, 1764, my Man J. T. had the Misfortune to fall down some Steps and to receive from the Edge of one of them a violent Contusion in the Small of his Back. Scarce any Sign appeared outwardly, but his Left Leg was struck useless. I immediately passed a few Shocks through the Bruise.

Bruise. Other Things thro' Fear were applied, but Electricity seemed to do the most Good. Accordingly all other Applications were discontinued. In a Fortnight he was able to wait at Table, and do many other Things in his Business, and in three Weeks was cured.

CURE XVI.

MARCH 27, 1764, walking a little Way from my House, and looking on a poor Man digging Stones, he suddenly dropped his Tool, and cried out, I can't work, I must go home. His Soliloquy naturally led me to enquire, why? Sir, replied the poor Man, I have had a third Day's Ague for these six Weeks, and now I feel it coming upon me. I took him immediately to my Machine, and passed four Shocks through him cross-ways. Two from the Right Hand to the Left Foot, and two from the Left Hand to the Right Foot. I saw no more of him 'till *April* 9 following. When he told me he never had the Ague but once after, and that only for three Minutes, that he was then well and hearty, and his Stomach scarce ever satisfied with eating. His Name
is

is WILLIAM CARTER, his Age Sixty, and hethen lived in *Pile-street*.

CURE XVII.

MRS. H. Wife of Mr. H. in *Pipe-Lane*, for five Years had been so afflicted with acute Pains in her Left Leg and Right Arm, that her Life was rendered quite miserable. Her Leg was so benumbed that it had lost its Feeling.

WHEN she was brought to me, *May 6*, 1765, she was so weak that it was with Difficulty she was kept from fainting, but notwithstanding she was thus reduced, in five Days by the Help of two Persons she was able to walk to my House. The Shocks removed her Pains almost immediately, and the second Day of her Attendance the Numbness was taken off, and she began to perceive a Feeling in her Leg. After attending nineteen Times she was dismissed perfectly cured.

CURE XVIII.

JACOB GRIFFITH, a Seafaring Man, applied to me *May 21*, 1765, to electrify him for Pains and Swellings in his Legs and Arms. He told me that he had been discharged

charged from the *Hope* Man of War as incapable of Service, and that he had been likewise dismissed from *Portsmouth* Hospital as incurable. He was cured by Shocks, attending only four Days.

C U R E X I X .

S. W***M, in the Year 1762, whilst in Service in *London*, had the Misfortune to cut her Hand with a Tin-Box, as she was making Pomatum. She thought the Wound trifling, but in a Day or two it grew painful. An eminent Surgeon dressed it. It grew worse; and at last became so bad, that a Consultation was held how to proceed. The Result was; to save Life she must lose her Hand. When the poor Creature heard this, she begged with many Tears and Intreaties that her Hand, if possible, might be saved, having no other Way, but Servitude, to get her Bread. Trial was made, and it so far succeeded that the Wounds were healed up. In the Summer 1765, she came with a Family to *Bristol*, going to *Nevis*. Here she was directed to me. I do not remember ever to have seen an Hand so distorted. It was much wasted, as was likewise her Arm. She

She was always in Pain, and her Fingers and Hand had totally lost all Feeling. Her Hand was so extreamly weak that she could not lift a Pound Weight with it.

HAVING never had a Case similar to this, I could not give her much Encouragement. I could only say that no one could positively declare what Electricity would not cure; broken Bones excepted.

HER Feeling was so lost that at first she did not perceive the Shocks in her Hand, tho' I gave her several very smart ones. The fourth Morning she began to feel, this encouraged me. And she herself was so sensible of Relief, that she quitted her Place, in order that nothing might hinder her Attendance. In ten Mornings there was a manifest Appearance for the better. Her Pain was taken off, and her Arm and Hand were so strengthened that she could lift a Chair. After this her Joints began to appear, and her Fingers to be flexible; for before there was no Bending in her Fingers, nor a Knuckle to be seen.—She told me she could feel the finest Needle, and use it with Ease. The Shape of her Hand was much altered for the better.

G

CURE

CURE XX.

IN *February* 1765, my Wife, after Lying-in, was seized with an almost total Loss of the Use of her Limbs. Not a Joint was free from excruciating Pain, which so deprived her of Rest that her Intellects were affected. She appeared so bad that Blisters were judged needful. Accordingly two were applied to the Small of her Legs. When she was able to sit up in the Bed, she begg'd I would electrify her. Her Knees swelled, her Ancles spread, and not a Joint in her Hands but what was enlarging. The Effect of the Shock was surprizing, it reduced the Swellings, took off her Pains and caused her to have good Nights. But what is remarkable, such a Deadness fell on the Places where the Blisters were put, that for a long Time she had not the least Feeling in the Small of her Legs; and I believe never will have the Feeling there she had before. I have the greatest Reason to believe that Electricity, under GOD, preserved her Life; for besides what I have mentioned, there were strong Symptoms of a Dropsy. I passed the Shocks thro' her Pains, and sometimes

times shocked her whole Frame, giving the Shock from Hand to Foot. These Shocks, she said, did her most Good. She recovered. But a Weakness has continued ever since in her Legs and Ancles. A Cramp teaz'd her for a long Time after, but Electrifying always relieved her. It still at Times catches her, but not so violently.

Doubtful CURE XXI.

THIS Case ought to be, and would have been the first, could I have spoken with Certainty of it, it is only introduced here for its Peculiarity.

IN *September* 1760, Mrs. EVANS, Wife of Mr. EVANS, Corn-Chandler, in *St. Mary-port-street*, desired me to electrify her. Her Complaint was a fixed and sharp Pain in the Small of her Back, caused, as she apprehended, by frequent Miscarriages. No Cost had been spared to obtain a Cure. The ablest Physicians had been consulted, and the Bath had been tried.

WHEN she came to me, she declared she had not lain down in her Bed for a Twelve-month, but was oblig'd to be bolstered up; and if at any Time she fell in her Sleep on

one Side, she was awakened with a Pain, as if Needles were piercing her.

I passed four Shocks thro' the Place where the Pain was fixed. The next Morning she came to me full of Spirits, telling me she had lain down in her Bed, and had slept soundly till four o'Clock, and that the Pain was almost gone. I passed four Shocks more thro' the Pain, and she felt no more of it then. But taking too great Liberty with her new-acquired Strength, and lifting something too heavy for her, her Pain returned, but not with Violence. A few Shocks removed it.

SHE had at this Time an Asthmatic Complaint, and begged as electrifying had removed her Pain, that I would try if it would help her Breath. I passed two Shocks thro' her Stomach, and two Crossways from her Shoulders to her Sides. She said she was better. What further Effect it had I know not, for I never saw her after. I heard she went Abroad.

CURE XXII.

THE following remarkable Cure, not by myself, but by a Friend, who particularly desired

desired that I would insert it in my List, is here introduced with sanguine Hopes, that others would make Trial of Electricity in the same Case, being throughly perswaded that the Remedy will be found, if not effectual, yet most certainly innocent. The Short of the Relation is this. A young Gentleman fond of Electricity went to his Tinman's for something he had bespoke of him, who at that Crisis was thought to be dying of the Gout in his Stomach. He was desired to go up Stairs; as soon as the poor Man saw him, Sir, says he, for GOD Sake electrify me. The Machine was brought and several Shocks were given through the Stomach, where the Pain was felt. The Patient every Time begg'd that the Shocks might be stronger; at last a great Quantity of Wind came up, and he immediately cried out, "I am better." That Night he rested tolerably well. The Gout almost instantly shifted from his Stomach to his Feet. But next Day making too free with himself, and drinking some Ale, the Gout returned to his Stomach. The Shocks were repeated, and the Patient's Account was, "I feel the Gout retire to my Feet." He was cured.—

Some

Some Years after I saw him, conversed with him, and heard the above Particulars from him.

I could produce many more Cures, sufficient to make a Volume of no small Size; but as I only write for Information, Prolixity has been studiously avoided by me, that the Reader might not be tired.

THE Account of the Cures therefore have been shortened as much as the Nature of them would admit. And those have been chiefly mentioned, that were the most singular, as a further and corroborative Proof of what has been before advanced, relative to the *secret and hidden Powers of Nature*.

Magna est Veritas & praevalerebit.

P. S. I have not said any Thing concerning the Manner of giving the *Shock*, and drawing the *Spark*, knowing how difficult it is to convey by Words the Method of a manual Operation. I ground this on the Complaints of many, who have bought Machines, " That in giving the *Shock*, they either give it improperly to the Patient or shock themselves, notwithstanding they have
care-

carefully attended to the Instructions given by Writers on the Subject."

I would therefore advise ocular Information, more may be learned from seeing an electrical Operation, than from Volumes on the Subject.

T H E E N D.



THE
OFFICE OF THE
SECRETARY OF THE
NAVY
WASHINGTON, D. C.
JAN 21 1901

NAVY DEPT

POSTSCRIPT.

THE following Extracts (from Mr. *HORNE'S *Candid State of the Case*, &c. printed 1753,) apposite to what Mr. LAW has asserted relative to Sir ISAAC NEWTON, are the strongest Proof that can be brought that Sir ISAAC laid no Claim to the Discovery of the Nature of the internal Power; which he sometimes calls *Agent*, sometimes *Fluid*, and sometimes *Æther*; for he ingenuously confessed his entire Ignorance of it, and said, I do not know what this *Æther* is; but he thought it worthy of a diligent Enquiry, and was therefore earnestly desirous that those, who came after him, would make a proper Use of his Experiments upon Phænomena towards settling what it is that produces them:

“ DR. PEMBERTON tells us, says Mr. HORNE, Sir ISAAC has often complained
to

* Now Bishop of NORWICH.

to me of being misunderstood in the Matter of * *Attraction*. What Sir ISAAC says upon this Head was not intended by him as a Philosophical Explanation of any Appearances, but only to point a Power in Nature not hitherto distinctly observed; the Cause of which and the Manner of its acting he thought was worthy of a diligent Enquiry." Pa. 42.

" *Neque adest, says Sir ISAAC, sufficiens Copia Experimentorum, quibus Leges Actionum hujus Spiritus accurate determinari et monstrari debent.*" Pa. 64. " We are not furnished with that Sufficiency of Experiments, which is required to an accurate Determination and Demonstration of the Laws by which this electric and elastic Spirit operates.

" Nothing

* To confirm this Mr. HORNE, Pa. 44, introduces the following Note. " The Moderns when they use the Words *Gravitation, Attraction, &c.* use them only to signify that there are such Effects and such Causes, with a frequent confession of their Ignorance of the true Springs of them: They do not pretend to make these Words stand for the *real Causes* of Things, as though they thereby assigned the true Philosophical Solution of these Difficulties; for in this Sense they will still be *Words without Ideas*, whether in the Mouth of an old Philosopher or a new one." Watts's Use of Reason, Pa. 47, Edit. 8th.

“ Nothing was ever less in Sir ISAAC's Thoughts than demonstrating the physical Causes of Nature by the Mathematics. He owns an entire Ignorance of them, and for that Reason throws all he has to offer concerning them into Queries only, earnestly desiring those, who come after to enquire further and make a proper Use of his Experiments on Phænomena towards settling what it is that produces them.” Pa. 73.

“ The Laws then, not the Causes of Motion and Gravity, are what he has discovered.” Pa. 40.

“ An universal *Fluid* is the grand *Cause* and *Agent* in Sir ISAAC's Opinion readily pervading all Bodies, and expanded throughout the whole Heavens.” “ Opt. Pa. 324. But Opt. Pa. 326, he says, I do not know what this *Æther* is.” Pa. 58.

All Philosophers, who have searched deep into Physics have acknowledged that there is in Nature a pervading * *Agent*; but what it is none of them have yet been able to discover.—By the Help of an Electrical

* Mr. HORNE says, Pa. 56, “ The true and real *Agent* in Nature is so extremely fine and subtle, as to elude both Sense and Experiment.”

Electrical Machine I have fortunately been able to shew it evidently to the Senses: But it seems I have vitiated the Discovery by introducing JACOB BEHMEN and Mr. LAW. It would have been better, said one, had these Authors been kept out of Sight. How huge an Offence! That GOD should teach a poor illiterate Shoemaker such Mysteries is more than human Pride will allow. But let human Pride, if it can overturn the Experiments I have produced and open to view more clearly than I have done, the hidden and active Powers in Nature.—

When so clear a Testimony is objected to, no one can certainly think me unfair to call for better and more convincing Evidence: And until *that* is produced, I think I may claim, even with Modesty, that I have found out Mr. BOYLE's *Terra incognita*, or undetected Part, and Sir ISAAC NEWTON's *Universal Fluid*.

BRISTOL, Aug. 9, 1790.

F I N I S.





